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ABSTRACT

The Memphis-Project Literacy U.S. (M-PLUS) coalition tried the reading immersion concept with a defined target audience in the workplace. Fifty-six employees of the Defense Depot and the City of Memphis (Tennessee) were admitted to the program based on test scores of between 2.0 and 7.0 grade levels on the Gates-MacGinitie Reading Test. The program was conducted onsite in the workplace by trained teachers. Instruction was conducted about 6.5 hours per day for two weeks, in small groups based on reading grade level. The program used a diagnostic-prescriptive approach to reading instruction. Group sessions were conducted using job- and community-related materials such as maps, forms, charts, and graphs. Instructional methods consisted of assisted reading, silent reading, oral reading, phonics, small group reading, and completion of practice exercises. Standardized instruments were used to evaluate the program and its participants. As a result of the program, mean reading scores for the participants increased, and participants indicated a positive attitude toward education. Some of the lessons learned about teaching in the workplace were the following: (1) initiation of programs must begin at the top; (2) motivation to learn was increased when family and friends were involved in the program; (3) literacy consciousness often transferred from classroom to home and workplace; (4) adult learners must feel some input to the content/methods of their learning; (5) neither testing nor years of formal schooling are a good indicator of reading skill; and (6) the immersion reading program stimulated many to continue their learning. Finally, the study cautioned that educators must be wary of labeling students as illiterate or aliterate. (KC)

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TEACHING READING IN THE WORKPLACE

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INTRODUCTION

American business, industry and government leaders have finally realized that productivity is centered on the quality of the people who do the work. Improving that quality at all levels is a challenge. Specific problems must be identified, solutions must be recommended, and a commitment to excellence must be made individually and collectively. David Kearnes, Chief Executive Officer of Xerox Corporation recently stated:

> "The basic skills of our entry-level workers are simply not good enough to give us the kind of work force we need to compete in a fiercely competitive global market. This is no less than a survival issue for America."(1)

Illiteracy and aliteracy are definite factors in American low productivity and are a threat to the well-being of this country. Project Plus U.S. seeks to raise the consciousness level and awareness level of the need for this country to identify and attack this literacy problem wherever it exist.

The Memphis-Project Literacy U. S. (M-PLUS) coalition endorsed testing the reading immersion concept with a defined target audience in the workplace. The program was meshed with other initiatives to improve employee morale and increase productivity.

The target audience was defined by reading grade level. The Gates-MacGinitie Reading Test was administered to sixty employees of the Defense Depot and the City of Memphis to determine their reading grade level. Fifty six individuals were identified as reading between the 2.0 and 7.0 grade levels and four were classified as non-readers.

The purpose of the study was to simulate conditions in the workplace that parallel those in the Navy where the immersion concept for upgrading reading skills is operational and has proven sucessful with young adults.

PROGRAM DESCRIPTION

The reading immersion program was conducted on site in the workplace. The program is discussed in terms of participant selection, instructor selection and staffing, training delivery, instructional methodology and materials, and evaluation.

1. Participant Selection

Information was distributed by the employers to supervisors in the workplace asking them to encourage and recommend individuals to volunteer for the program. One hundred and eight people volunteered. Administrators from the Chief of Naval Technical Training administered the Gates-MacGinitie Reading Tests to them; sixty were selected because they scored below the 7.0 RGL that was established as the cutoff entry into the

program.

The demographic characteristics of the learners were:

1. The educational level ranged from less than 2.0 years of formal schooling to some college.
2. The age range was 30 - 71 years with a mean of 45 years.
3. Forty two of the participants were males and eighteen of them were female.
4. Pretesting with the Gates-MacGinitie Reading Tests yielded scores ranging from non-readers to 7.0 with a mean RGL of 4.36 for the group.

2. Instructor Selection and Staffing

Instructors were selected for the program by the Memphis City Schools Adult Basic Education Program, Defense Depot personnel and Chief of Naval Technical Training (CNTECHTRA) personnel. The instructors had extensive experience in teaching both children and adults. Two of the instructors were retired teachers; one had taught at the high school level and one had taught at the elementary level. One instructor was trained in the Laubach Literacy Method of teaching adults, and one instructor had experience teaching English As a Second Language.

The four instructors were paid by the Adult Basic Education program and were released from their regular assignments to conduct this trial of the immersion concept.

3. Training Delivery

Instruction was conducted from 0800 until 1145 with one break in the morning. The afternoon session was conducted from 1245 until 1530 (3:30) with one break. The length of the instruction consisted of six and one half hours daily for a period of two weeks.

Instructional groups were formed based on reading grade level. The classroom facilities consisted of a large training room that could be used for large group instruction and could be divided to serve three smaller groups. A second classroom was smaller and would only accommodate a single group at any given time.

The facilities were well lighted and contained portable chalkboards. Generally, the facilities were adequate, however, they were on the second floor of the building making access a bit difficult. The close proximity of restroom facilities, dining room facilities, and refreshment machines contributed to a more comfortable and productive instructional day.

4. Instructional Methodology and Materials

The program was a diagnostic, prescriptive approach to reading instruction. Several weeks prior to instruction each learner was administered the comprehension section of the Gates-MacGinitie Reading Tests, Level D, Form 1, to determine his entry reading level.(7)

Individuals were grouped for instruction based on the pretest scores. The groups were organized around the following grade levels: 0 - 2.9, 3.0 - 4.1, 4.2 - 5.3, 5.6 - 7.0, and other. The size of the groups ranged from five to six people. The groups were established prior to class convening in order to select appropriate materials and to focus instruction. It should be noted that the instructional level of individuals begins slightly lower than the tested level because it permits the individual to demonstrate success immediately. Early success is a basic axiom for teaching adults.

Within each group, individuals were allowed to proceed at their own rate. Some individuals moved rapidly to more difficult materials while others moved more slowly (requiring more time to build self-confidence). Group sessions were conducted using job and community-related materials such as maps, forms, charts and graphs. These group sessions focused on developing writing, interpersonal relations, analytical, and communication skills. Harman succinctly described in Illiteracy: A National Dilemma, what our teachers were trying to accomplish when he stated:

> An appropriate educational program is one that caters to a specific group of participants, deriving its content and methods from the group's needs. Such a program would seek to address topics that are meaningful and desirable for its participants and would focus on helping them to realize the objectives they have set for themselves.(3)

Improved writing, improved ability to understand their reading, and improved communication of ideas were all stated goals of the participants.

Instructional methods consisted of Assisted Reading, Silent Reading, Oral Reading, Phonics, Small Group Reading, and Completion of Practice Exercises. Assisted reading lets the reader understand how the process works by increasing his confidence as the teacher assists in the pronunciation of words.

Silent reading coupled with completion of practice exercises permits the learner to check his understanding and mastery of what is being read. The teacher can also use the practice exercise to monitor the progress of the learner and to use them to prescribe other readings. Oral reading promotes confidence because the learner can hear the progress that he is making in reading.

Phonics was minimally used in this program because most of the learners had the necessary skills to divide and pronounce words. However, the phonics conditions were applied periodically as a reminder to the learner that he was to use all of the skills that he possessed to attack a problem.

Practice exercises promoted writing, stimulated discussion among group members and provided feedback to the instructor. Each member of the group was asked to explain "why" he answered in a certain way and to asked relate the "why" to previous learnings.

The materials used in this program were:

Title	Publisher
Reading Skills For Adults	Steck Vaughn Company
Map Skills For Today	Weekly Reader Series
Read on the Job: PAL Life Competency Program	Xerox Corporation
Reading For Today	Steck Vaughn Company
Famous Black Americans	Steck Vaughn Company
English Lessons For Adults	Harcourt Brace Jovanovich
Modern Reading Skill Text Series	Charles E. Merrill
GED Scorebooster 2	Steck Vaughn Company

5. Evaluation

Standardized instruments, questionnaires, and information sheets were used to gather data about the program and its participants. The Gates-MacGinitie Reading Tests, Level D, Form 1, was the standardized instrument used to measure reading grade level. The comprehension section of this test was administered. It consists of forty-three items using a multiple choice pattern for responses. The respondent chooses the best answer from the four choices. The instrument has a reliability cooefficient of

.88 to .94 for alternate forms using the Kuder-Richardson Formula 20. Validity measures for the test were established for both younger and older adults using inferential and literal reading passages suitable for the interests of both groups.(7)

The Attitude Toward Education Questionnaire, developed by Jones and Petry, was modified and administered to measure the perceived effects of the program on six factors considered to be essential for a quality lifestyle.(4) The six factors included in the questionnaire are: self-expression, self-concept, family life, leisure, relationships with others, and life in general. The instrument was developed in 1980 using concepts taken from the adult education literature that relate to the lifestyle factors. Validity of the instrument was determined using the judgements of experts who were familiar with the literature and reliability was determined using a Spearman-Brown Split Half technique. Reliability was determined to be .78. The modified version consists of sixteen items scored on a likert-type response scale which ranges from strongly agree to strongly disagree. Individual scores range from a maximum of 80 to a minimum of 16.

The subscales of the instrument consist of self-expression using items 1 - 3, education using items 4 - 6, family life using items 7 -8, life-in-general using items 9 - 10, leisure using items 11 -12, and relationships with others using items 13 - 16.

FINDINGS

These findings were determined from observations made by the experienced adult education teachers during the instructional process and the administration of the instruments.

1. Mean reading scores for the participants increased.

Mean pretest scores were at the 4.36 RGL and posttest scores was at the 6.2 RGL indicating an overall increase of 1.9. Individual scores ranged from a -1.1 RGL deficit to a +6.7 RGL increase.

When one examines the data, tremendous, almost astonishing, gains in reading grade level (+6.1 and +6.7) were made, while others made no progress or decreased in reading grade level. Harmon may have given us a partial explanation when he said that many adults are aliterates. These individuals have the skills to read, however, they cease to use them causing a degeneration of skills. However, when used again or given a need, these reading skills return quickly and often to levels exceeding previously learned ones, perhaps, accounting for our large gains.

On the other hand, Harman believes that readiness to read and need to read are very important factors affecting student progress. The learners who did not progress were older students who often discussed what they were planning when they retired. For them, the motivation or need to read was not of sufficient magnitude to affect their classroom performance. They went

through the motions of reading, but they did not seem to internalize the lessons as did those who were younger and who had more ambitious personal goals. Learners learn in response to their felt needs and perceptions, not those of their instructors. Adult learners must have a readiness to change something in their lives before they can achieve maximum benefit from instruction.

2. Participants indicated a positive attitude toward education.

A mean score of 4.51 for self-expression indicated that the participants felt that the program helped them talk more easily with others, helped them express their ideas on paper, and helped them express their ideas orally. It should be noted that each teacher spent some time each day conducting simple writing exercises and helping the individuals organize their thoughts prior to the writing. Apparently, this was viewed as most beneficial.

A mean score of 4.59 is a positive feeling by the participants about education. The instructional process focused on completing reading tasks, sharing ideas, and discussing the value reading. These processes were translated into a more positive attitude toward education as measured by the questionnaire.

Two items focused on the extent to which the participants felt that the class helped them with family relationships. Although the mean score of 3.88 is positive, it was rated lowest of the questionnaire variables. Classroom instruction did not focus directly on developing family relationships; however, we were hopeful that sharing ideas, listening to the concerns of others, attacking problems with an open mind, and improving reading skills would be transferred to family relations.

Developing more confidence about their future goals and gaining insight about life were perceived to be of value to the participants. They rated these attribute of life-in-general with a mean score of 4.56 which was the highest rating of any of the subtests.

Learning to read with improved skill apparently stimulated the learners to read a wider variety of things and to spend some leisure time reading. The activities using the newspaper and the community materials were focused to improve variety as well as stimulate interest in reading.

Relationships with others as described by being open to the lifestyle of others, working with others, and being more open to the opinion of others were rated at 4.40. This positive score reinforces the need for adult education programs to include small group discussions and other instructional strategies that will enable the learner to share his thoughts with his classmates and teachers.

CONCLUSIONS

The major conclusions about the reading project conducted in the workplace are that reading grade level of adult learners can be increased using the immersion concept. Secondarily, an immersion concept for reading improvement will work in and is an appropriate instructional strategy for the workplace.

LESSONS LEARNED ABOUT TEACHING IN THE WORKPLACE

1. Initiation of programs must begin with the Chief Executive Officer.

The most obvious reason for approaching the chief executive officer concerning potential educational programs in the workplace is that of securing funding, time/overtime allotment and/or space and materials. Since this branch of the organization controls the budget and eventual distribution of material resources, executive commitment must be established before extensive, possibly expensive, planning is begun.

2. Workers encounter a number of job related problems when they cannot read or write.

Most jobs require some basic communication skills. Inability to read causes individuals to fail to understand when meetings are to take place, understand pay changes, understand changes in work schedules, or in performing new requirements. Participants shared their major concern of safety around new machinery. "I did not know how it operated, I could not read the signs that were posted, I was afraid." When asked how he coped with this situation, the reply was "I said, Joe what do you think about this sign and how it will help us operate this machine. . Joe, then read the sign for us."

3. Motivation to learn was increased when family and friends were involved in the reading program.

The learners were told early in the instructional program that there would be a reception on the last day and that they could invite family and friends to attend. Each day as the learners gained more and more confidence and saw their reading improve, they began discussing "who" they would invite to the reception. "Graduation day" was full of excitement as grown children, close friends, and spouses provided the learners with wide grins, hearty handshakes, hugs, and encouragement for their bravery and for their obvious success. Mothers and fathers, husbands and wives glowed as they sought out their teachers to meet their special guests. Younger learners expressed the wish that their schoolage children could have attended the reading program. Obviously, "graduation day"
was a high point in each participant's life and served as reinforcement and motivation for the importance of including families and friends in the attainment of personal goals.

4. The literacy consciousness developed by some learners transferred from the classroom to the home and the workplace.

In order to help transfer the literacy consciousness to others, some homework was required of the learners each day. Taking home books and doing homework were testimonials to friends and family about the value of learning, about the commitment to learning, and the attainment of short-term goals.

Children and adults tend to be more influenced by what they see rather than what they are told. One learner, a young mother with young children, exclaimed the pride and curiosity displayed by her fifteen year old son as she discussed what she had learned "in school" that day; she smiled warmly as she also told of being better able to help her fifth grader with his homework.

Some of the supervisors would telephone their employees in the evening to discuss what was going on in the program. These telephone calls were a source of pride for the learners. They spoke of admiration of these supervisors who encouraged them to "learn all you can learn while you are there."

5. The teachers of adults established an instructional climate that was conducive to learning.

Several conditions existed that contributed to a warm instructional climate. The teachers were facilitators of learning. They asked questions. They listened with patience while the learners expressed their ideas. They asked questions which caused the learners to rethink, rephrase, and respond in a clearer manner. The environment was secure and supportive; help was provided on call and empathy eased learners' fears and anxieties.

A second condition that contributed to the development of a warm instructional climate was that the teachers taught sitting down at the table with their learners. This gave the learner a feeling that the teacher was very sincere and caring. It also provided the teacher an opportunity to read facial expressions (responding to puzzled looks or excitement reflected in the learners' eyes).

It should be noted that it is very difficult for an inexperienced teacher to create and maintain a warm, conducive instructional climate because learning to identify and interpret the non-verbal cues of learners only comes with time and practice. In fact, adult learners are most difficult to read in terms of non-verbal cues since they have years of experience hiding their deficiencies behind a mask of little expression.

6. Adult learners must feel some input to the content/method of their learning.

Throughout the instructional day the participants were questioned as to which materials they enjoyed reading. They were asked to tell where they would like to work and have additional practice. Having a wide variety of materials at increasing

difficulty readily available allowed the instructors to keep high student interest, personalize the learning for each individual, and keep the learning purposeful. Evaluation periods were held at the end of each day to summarize skills mastered and plan the next day's activities. Teachers listened to learner concerns and collectively, they made recommendations for the next learning session. Consequently, an adult who is actively involved in the learning process and planning the learning activities is usually satisfied with the result.

Daily evaluation periods also allowed the teacher to praise good work, maximize learning, and create espirit de corps. All of which are easy to accomplish in small groups who have similar abilities and skills.

7. The instructional materials were designed especially for adults.

The instructional materials used were the latest, most up-to-date on the market. They took into account the age, sex, occupation, hobbies, as well as the reading levels of adults. No one book or set of materials addressed each of these characteristics, but the total set of materials covered them all. This wide variety of materials permitted the instructor to tailor instruction to the interests as well as to the needs of the learner.

8. Diagnostic testing may not give an accurate assessment of reading skills.

Some participants were originally classified as nonreaders, but upon further assessment, it became known that these older participants had experienced test anxiety and lacked testtaking skills. Completing the tiny "bubbles" on the standardized answerd sheet was a totally new experience for some, and for others were difficult to see. The time limit to complete the test also caused some of them to panic, while others, out of past failure, gave up quite easily - not participating was less painful than being found deficient. Solutions to these problems may be a minilesson on testtaking strategies including practice on "bubbling-in" on standardized tests. Test administrators must be very slow, precise and clear when giving directions to adults.

9. Years of formal schooling are not a good indicator of reading skill.

Some of the participants indicated they had graduated from high school; however, all of these scored below the 7th grade reading level. Since employers are interested in certificates, diplomas, and degrees on the front end of employment, they may not realize that missing skills or eroded skills surface only when the people are on the job and are expected to perform.

Sadly enough, many employers do not recognize the interrelationships amon job performance, feelings of adequacy and self-worth, and reading skills. Therefore, business, industry, and government must seek avenues to develop a totally functional employee and look beyond years of initial schooling.

10. An adult's literacy awareness influences his children's and grandchildren's interest and success in school.

The participants in this reading program expressed the fact that they had begun to feel comfortable reviewing their children's schoolwork. They had begun to talk the same language as their children's teachers - main idea. syllables, vocabulary, inferences. Many related how they had become more interested in the the books and materials brought home by their children. In turn, the children became interested in their parents/grandparents learning and learning materials. The impact of this literacy awareness cannot be easily measured, but the 42 school age children in the homes of these learners were surely affected in some positive way.

11. The immersion reading program stimulated many to continue their learning.

Many learners signed up to begin an adult education program and continue their learning. The program is offered on-site beginning thirty minutes after completion of the workday. Several were excited that this class would teach the mathematics and language skills needed to pass the GED test. The learners who had a high school diploma hoped to attend this class to raise their basic skills enough to enter the local two year colleges. The motivation to complete the short term goals of this reading class stimulated latent long term goals.

12. Program coordinators must be very careful to avoid using terms such as "illiteracy", "aliteracy", and/or "literacy".

Adults who choose to attend reading improvement programs do not want to be viewed as illiterate. They avoid being labeled. In this program, many of the learners insisted that the classroom door remain closed so that they could not be seen from the hallway. Three of the learners elected not to participate in the awards ceremony because they were afraid the "media" would present them as illiterate or aliterate. Program coordinators must ensure that the program focuses on "improvement" without presenting any connotation of deficiency.

TABLE 1

ATTITUDE TOWARD EDUCATION QUESTIONNAIRE

Directions: The following are statements concerning this program. Their purpose is to gather information about the attitudes that learners have about the program. The statements are of such nature that there are no right or wrong answers. Please indicate your personal opinion concerning each statement by circling the appropriate response at the right of each statement.

Key: 5 - Strongly Agree (SA)

4 - Agree (A)

3 - Undecided (U)

2 - Disagree (D)

1 - Strongly Disagree (SD)

		SA	A	U	D	SD
1.	I feel that I can talk more easily with other people.	5	4	3	2	1
2.	This class has helped me to express my ideas on paper.	5	4	3	2	1
3.	This class has helped me to express my ideas orally.	5	4	3	2	1
4.	This class has increased my ability to complete reading tasks.	5	4	3	2	1
5.	I am more open to change and new ideas because of this class.	5	4	3	2	1
6.	This class has increased my desire to better myself educationally.	5	4	3	2	1
7.	I feel more confident when I am with my family.	5	4	3	2	1
8.	I feel this class has improved my relationships with my family.	5	4	3	2	1
9.	This class has enabled me to be more confident about my future goals.	5	4	3	2	1

10.	In this class, I have gained some wisdom and insight about life.	5	4	3	2	1
11.	This class has caused me to read more in my leisure time.	5	4	3	2	1
12.	Because of this class, I have a wider interest range.	5	4	3	2	1
13.	This class has reinforced the idea that I have a responsibility to others.	5	4	3	2	1
14.	Because of this class, I am better able to work with groups of people.	5	4	3	2	1
15.	I am more open to the different life-styles of others.	5	4	3	2	1
16.	I am more open to the opinions of others.	5	4	3	2	1

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

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